UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

24325

7590

04/17/2008

PATENT GROUP 2N JONES DAY NORTH POINT 901 LAKESIDE AVENUE CLEVELAND, OH 44114

EXAMINER				
WONG, EDNA				
ART UNIT	PAPER NUMBER			
1795				

DATE MAILED: 04/17/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,120	11/28/2001	Kwong-Yu Chan	609920600024	1508

TITLE OF INVENTION: METHODS AND APPARATUS FOR THE OXIDATION OF GLUCOSE MOLECULES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$720	\$300	\$0	\$1020	07/17/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of th Fee(s) Transmittal. This certificate cannot be used for any other accompanyin papers. Each additional paper, such as an assignment or formal drawing, muhave its own certificate of mailing or transmission.			
²⁴³²⁵ PATENT GRO JONES DAY NORTH POINT	OUP 2N	7/2008	I S	Ce hereby certify that that the lates Postal Service	rtificate nis Fee(s with suff 1 Stop 1	of Mailing or Transr	deposited with the United t class mail in an envelope above, or being facsimile
901 LAKESIDE CLEVELAND,							(Depositor's name)
022 - 22.1 .2,							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	OR .	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
09/996,120	11/28/2001		Kwong-Yu Chan		6	509920600024	1508
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$720	\$300	\$0		\$1020	07/17/2008
EXAM	MINER	ART UNIT	CLASS-SUBCLASS				
WONG	, EDNA	1795	204-413000				
"Fee Address" ind PTO/SB/47; Rev 03-(Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Un	AND RESIDENCE DATA less an assignee is ident th in 37 CFR 3.11. Comp	" Indication form led. Use of a Customer A TO BE PRINTED ON	data will appear on the	tively, Igle firm (having as r agent) and the nan ttorneys or agents. If one printed. Itype) patent. If an assign assignment.	a membernes of up no name	er a 2 o to e is 3 entified below, the do	ocument has been filed for
Please check the appropr	riate assignee category or	categories (will not be p	rinted on the patent):	☐ Individual ☐ C	orporatio	on or other private gro	up entity Government
4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta	itus (from status indicate ns SMALL ENTITY statu	*	☐ b. Applicant is no l	onger claiming SMA	LL ENT	TTY status. See 37 CF	FR 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	ed from anyone other that k Office.	n the applicant; a reg	istered a	ttorney or agent; or the	e assignee or other party in
Authorized Signature	,			Date			
Typed or printed nam	ne			Registration 1	No		
an application. Confiden submitting the complete this form and/or suggest	ntiality is governed by 35 dapplication form to the ions for reducing this but Virginia 22313-1450. DC	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th	1.14. This collection is y depending upon the induced ne Chief Information Off	estimated to take 12 lividual case. Any c icer. U.S. Patent and	minutes omments Tradem	to complete, including s on the amount of tin tark Office, U.S. Depa	by the USPTO to process) g gathering, preparing, and ne you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/996,120	11/28/2001	Kwong-Yu Chan	609920600024	1508	
24325 75	90 04/17/2008		EXAM	INER	
PATENT GROUP 2N			WONG, EDNA		
JONES DAY			ART UNIT	PAPER NUMBER	
NORTH POINT			1795		
901 LAKESIDE AVENUE			DATE MAILED: 04/17/2008		
CLEVELAND, OF	1 44114				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1250 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1250 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	09/996,120	CHAN ET AL.	
Notice of Allowability	Examiner	Art Unit	
	EDNA WONG	1795	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS	pears on the cover sheet will S (OR REMAINS) CLOSED in	th the correspondence address this application. If not included	t
herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT FOR the Office or upon petition by the applicant. See 37 CFR 1.31	RIGHTS. This application is s		
1. X This communication is responsive to Amendment After Fi	nal dated April 2, 2008.		
2. X The allowed claim(s) is/are 1,2,7,11,13,49-55,62 and 67-7	<u>74</u> .		
3. ☐ Acknowledgment is made of a claim for foreign priority u a) ☐ All b) ☐ Some* c) ☐ None of the:	under 35 U.S.C. § 119(a)-(d)	or (f).	
All b) ☐ Some c) ☐ Notice of the. 1. ☐ Certified copies of the priority documents have.	ve been received		
□ Certified copies of the priority documents have □ Certified copies of the priority documents have		n No	
Copies of the certified copies of the priority documents have	• •		on from the
International Bureau (PCT Rule 17.2(a)).	ocuments have been received	a iii tiiis iiationai stage appiicati	on nom the
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requ	uirements
4. A SUBSTITUTE OATH OR DECLARATION must be subr INFORMAL PATENT APPLICATION (PTO-152) which give			OTICE OF
5. CORRECTED DRAWINGS (as "replacement sheets") mu	ıst be submitted.		
(a) ☐ including changes required by the Notice of Draftsper	rson's Patent Drawing Review	v (PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	<u>.</u>		
(b) ☐ including changes required by the attached Examiner Paper No./Mail Date	r's Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in			oack) of
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT 			ote the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 □ Notice of In	formal Patent Application	
 Notice of References Cited (FTO-692) Dotice of Draftperson's Patent Drawing Review (PTO-948) 		ummary (PTO-413),	
	Paper No./	Mail Date	
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 		Amendment/Comment	
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	8. ⊠ Examiner's 9. □ Other	Statement of Reasons for Allow	vance
	5. 🗀 Oulei	_•	
	/Edna Wong/ Primary Examiner Art Unit: 1795		

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Claims 1-2, 7, 11, 13, 49-55, 62 and 67 are allowable over the prior art of record because the prior art does not teach or suggest a method comprising the step of catalyzing as presently claimed.

Claims **68-74** are allowable over the prior art of record because the prior art does not teach or suggest a method comprising the step of catalyzing as presently claimed.

The prior art does not contain any language that teaches or suggests the above. Sato et al. teaches an electrode for use in the electrolysis of aqueous solutions of <u>metal halides</u>. The electrode comprises an electrically conductive substrate and, formed thereon, a coating comprising <u>Pt/SnO/CoO</u>. The present claims recite an <u>electrochemical</u> oxidation of <u>organic molecules</u> in liquid solution with a catalyst comprising a mixture of <u>Pt/Co/Sn</u>. Therefore, a person skilled in the art would not have been motivated to adopt the above conditions, and a prima facie case of obviousness cannot be established.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to EDNA WONG whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edna Wong/ Primary Examiner Art Unit 1795